

Specification

- The Abstract on page 29 of the Specification is replaced by,

“A process for fabricating a whole solid-state pH sensing device by using the polypyrrole as the contrast pH detector and a whole solid-state pH sensing device fabricated by the process are disclosed, wherein said device is a differential pair framework potential electrochemical sensing device fabricated by using a non-insulating solid-state inorganic ion-sensing membrane and a polypyrrole sensing membrane.”

- The line 8 page 10 of the Specification,
“Step 3: ~~touting~~ the device;”

is replaced by,

“Step 3: ~~touting~~routing the device;”

- The line 25 page 13 to line 8 page 14 of the Specification,

“step D: connecting the substrate to the positive electrode of a power supply, connecting the platinum electrode to the negative electrode of the power supply, and immersing the substrate into the electro-polymerizing solution while the power supply provides a constant potential which is higher than the oxidizing potential of the conductive polymer (e.g. 4V for electro-polymerizing polypyrrole) for 15 minutes, thus polymerizing the conductive polymer on the substrate 64;”

is replaced by,

“step D: connecting the substrate to the positive electrode of a power supply, connecting the platinum electrode to the negative electrode of the power supply, and

~~immersing~~immersing the substrate into the electro-polymerizing solution while the power supply provides a constant potential which is higher than the oxidizing potential of the conductive polymer (e.g. 4V for electro-polymerizing polypyrrole) for 15 minutes, thus polymerizing the conductive polymer on the substrate 64;”

- The line 9-11 page 14 of the Specification,
“step E: Immersing the polypyrrole sensor into deionized water for 10 minutes to clean the polypyrrole sensor 65;”

is replaced by

“step E: ~~Immersing~~Immersing the polypyrrole sensor into deionized water for 10 minutes to clean the polypyrrole sensor 65;”

- The line 3-7 page 15 of the Specification.
“immerses the finished device into a electro-polymerizing solution of polypyrrole to polymerize the polypyrrole 76 on the tin dioxide sensing membrane 73 and thus completes the fabrication of the polypyrrole pH sensing electrode.”

is replaced by

“~~immerses~~immerses the finished device into a electro-polymerizing solution of polypyrrole to polymerize the polypyrrole 76 on the tin dioxide sensing membrane 73 and thus completes the fabrication of the polypyrrole pH sensing electrode.”

- The line 22-24 page 15 of the Specification.
“by immersing the device into the electro-polymerizing buffer solution that comprises a buffer solution, salts, polypyrrole, etc.,”

is replaced by

“by ~~immersing~~immersing the device into the electro-polymerizing buffer solution that comprises a buffer solution, salts, polypyrrole, etc.,”

- The line 5-8 page 17 of the Specification,

“Therefore, the invention uses higher potential of 4 volt to electro-polymerize the membrane of the polypyrrole and fabricate a whole solid-state pH Sensing device with lower sensitivity.”

is replaced by

“Therefore, the invention uses higher potential of 4 volt to electro-polymerize the membrane of the polypyrrole and fabricate a whole solid-state pH ~~Sensing~~sensing device with lower sensitivity.”

- The line 9-12 page 17 of the Specification,

“Referring to Fig. 6 (a) and Fig. 6 (b) , there are the characteristic measuring framework diagram of the pH Sensing device and the differential pair framework sensing device, respectively.”

is replaced by

“Referring to Fig. 6 (a) and Fig. 6 (b) , there are the characteristic measuring framework diagram of the pH ~~Sensing~~sensing device and the differential pair framework sensing device, respectively.”

- The line 20-22 page 17 of the Specification,

“From the complete read-out circuit framework of the whole solid-state pH Sensing device shown in Fig. 6(b),”

is replaced by

“From the complete read-out circuit framework of the whole solid-state pH ~~Sensing~~sensing device shown in Fig. 6(b),”

- The line 1-5 page 19 of the Specification,

“From the diagram it can be known that these characteristic curves are the output potential variation curves of the sensing device in 1 minute when the whole solid-state pH Sensing device immerses into various pH solutions.”

is replaced by

“From the diagram it can be known that these characteristic curves are the output potential variation curves of the sensing device in 1 minute when the whole solid-state pH ~~Sensing~~sensing device immerses into various pH solutions.”